

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number
WO 2004/029106 A1

(51) International Patent Classification: **C08F 10/00**,
41(54)

(21) International Application Number:
PCT/EP2003/010711

(22) International Filing Date:
24 September 2003 (24.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
02079062.2 27 September 2002 (27.09.2002) EP

(71) Applicant (for all designated States except US): **ATO-
FINA RESEARCH** (BE/BE), Société Anonyme, Zone
Industrielle C, B-7121 Seneffe (Foluy) (BE).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **RAZAVI, Abbas**
(IR/BE); Domaine de la Beisde 35, B-7000 Mons (BE).

(74) Common Representative: **ATOFINA RESEARCH**,
S.A., Patent Department, Zone Industrielle C, B-7121
Seneffe (Foluy) (BE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, FR, GB, GR, GU,
HK, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT,
RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GB, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SI, SK, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: **POLYOLEFIN PRODUCTION**

(57) Abstract: Provided is a process for producing a polyolefin having a multimodal molecular weight distribution, which process comprises: (a) polymerizing a first olefin monomer in the presence of an isomerizable metallocene catalyst, to form a first multi-
modal polyolefin component; and (b) polymerizing a second olefin monomer in the presence of a second metallocene catalyst to
form a second polyolefin component, wherein the molecular weight distribution of the first polyolefin component overlaps with the
molecular weight distribution of the second polyolefin component.

WO 2004/029106 A1